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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/788,065 | 02/16/2001 | Hai Thanh Ho | STL9690 | 5099 |

7590

03/13/2003

Jonathan E. Olson
SEAGATE TECHNOLOGY LLC
Intellectual Property Dept. - COL2LGL
389 Disc Drive
Longmont, CO 80503

EXAMINER

SNIEZEK, ANDREW L

ART UNIT

PAPER NUMBER

2651

DATE MAILED: 03/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,065

Applicant(s)

HO ET AL.

Examiner

Andrew L. Sniezek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 6-11 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3. 6) ☐ Other: _____

Information Disclosure Statement

1. The information disclosure statements filed 2/16/01 and 8/28/01 have been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Okamura.

Okamura teaches in column 9, line 44 – column 10, line 65 a data handling system including a recording surface (32), an actuator (36) and a servo circuit (23) that is used to position the actuator across the disk. As discussed in the noted columns a seek can be performed to move the actuator from a current position to a destination position. Also, taught is a filter (17) that is turned on during a settling mode (column 10, line 63) to suppress the resonance characteristics of the actuator produced while moving from a current position to a destination position. This teaching satisfies the limitations of claim 6. The claimed second order filter as set forth in claim 9 is satisfied by the equations described in column 11. The limitations of claim 11 are deemed satisfied by the teaching provided in column 10 discussing the use of plural heads.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, 4, 8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura ('285) in view of Waugh et al. ('615).

The teaching of Okamura is discussed above and incorporated herein. Claim 11 further sets forth a means for identifying a frequency of actuator arm oscillation induced by resonance mode excitation. This identifying means is not clearly discussed in Okamura, only that a filter is used to suppress the resonance mode present in the signal. Waugh et al. teaches in a similar arrangement that it is well known to have a means for identifying a frequency of actuator arm oscillation induced by resonance mode excitation. This means is the structure that performs seek to a destination track

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by a maximum acceleration and decelerations, (abstract). It would have been obvious to one of ordinary skill in the art to incorporate such a means in Okamura in order to identify the resonance of a particular actuator and then use a filter as taught by Okamura to eliminate the induced resonance during the positioning of the actuator across the disk. The limitations of claim 8 are similar as discussed with respect to claim 11 and therefore satisfied by Okamura and Waugh et al. as applied. Method claims 1-2 are drawn to the method of using the corresponding apparatus claimed in claims 8/6. Therefore method claims 1-2 correspond to apparatus claims 8/6 and are rejected for the same reasons of anticipation (obviousness) as used above. The limitations of claim 4 are deemed satisfied by the use of the notch filter (5) as taught by Okamura.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura as applied to claims 6, 9 and 10 above, and further in view of Ottesen et al. ('599)

The teachings of Okamura have been discussed above and are incorporated herein. Claim 7 further sets forth the use of a demodulator and a motor driver, which are used to position the actuator across the disk. Although not specifically taught in Okamura such features are well known in the art as seen from Ottesen et al. (figure 2) as an alternative actuating arrangement. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate such well-known features in the device of Okamura to provide an alternative driving arrangement since each produce the same results of moving the actuator across the disk.

Allowable Subject Matter

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8. Claims 3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The claimed method as set forth in claim 3/1 that removes the compensation signal while in the track following mode is neither taught by nor an obvious variation of the art of record. The claimed method as set forth in claim 5/4/1 that has a compensation signal generated in a manner as set forth is neither taught by nor an obvious variation of the art of record.

Conclusion

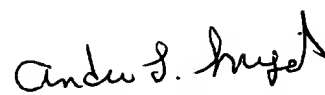
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kagami et al., Sri-Jayantha et al. ('036 A1) and Ding et al. are cited of interest to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Snizek whose telephone number is 703-308-1602. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-305-4700. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


Andrew L. Sniezek
Primary Examiner
Art Unit 2651

A.L.S.
March 5, 2003